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Residential outdoor learning experiences and Scotland's school curriculum: an empirical and philosophical consideration of progress, connection and relevance

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ABSTRACT

This paper explores the role and policy context of residential outdoor learning experiences within Scotland's school curriculum, and demonstrates that there are fundamental aspects of outdoor learning that have relevance beyond the educational framework of the time. We introduce an on-going example of such provision, Aiming Higher with Outward Bound (an educational initiative developed in 1998 and introduced into 26 secondary schools in North Lanarkshire, Scotland), and review the programme's evaluation (Christie 2004; Christie, Higgins and McLaughlin in review). Using central themes of progression, connection and relevance we examine that study and the role of residential outdoor learning more generally to consider its continuing curricular relevance. Furthermore we consider the philosophy and theory underpinning outdoor learning and begin to articulate the links to the current educational framework in Scotland (Curriculum for Excellence). In doing so we review recent research and highlight contemporary changes in the structure and nature of the education system, such as the implications of the Learning and Teaching Scotland (LTS) policy document 'Curriculum for Excellence Through Outdoor Learning' (LTS 2010a). The paper concludes by offering potential suggestions for future research and development that take account of emerging policy contexts.

INTRODUCTION

Current provision

There is substantial literature concerning outdoor learning¹, its possible benefits and its unexploited potential (Rickinson *et al.* 2004; The House of Commons Education and Skills Committee 2005; Amos & Reiss 2006; Dillon *et al.* 2006; O'Donnell *et al.* 2006, Beames *et al.* 2009 and others), much of which concerns residential experiences. However, the literature relating specifically to residential experiences is scarce (for example Christie 2004; Simpson, 2007; Centre for the Use of Research and Evidence in Education (CUREE) 2010; Power *et al.* 2009; Williams 2012) despite such provision remaining an extensive feature of Scottish and UK education (Higgins 2002). As residential provision is an aspect of outdoor learning more generally, we first consider this broader literature.

Whilst there have been strategic developments in outdoor learning throughout the UK at policy level (Department for Education and Skills 2005; Learning and Teaching Scotland (LTS)² 2007) this has not been universal and the provision of such experiences is variable (Mannion *et al.* 2007, Beames *et al.* 2009). Recently, Beames *et al.* (2009) summarised the current state of outdoor learning provision in Scotland stating that:

¹ The terms 'outdoor education' and 'outdoor learning' are often used interchangeably. Here we predominantly refer to 'outdoor learning' adhering to Beames *et al.*'s (2011:5) definition that 'outdoor learning covers all kinds of learning that might take place outside of the classroom'. However 'outdoor education' is used when discussing literature that used that term originally.

² In 2011 LTS became part of Education Scotland (ES) the national body supporting quality and improvement in Scottish education.

- (a) current patterns of outdoor learning provision can be described as being variable;
- (b) this variability is in part influenced by varying teacher perspectives on the relationships between outdoor learning and the official curriculum;
- (c) the costs of outdoor learning are perceived to be exceptionally high; and
- (d) the combined effect of (b) and (c) has left outdoor learning exceptionally exposed to school-by-school and teacher-by-teacher decision-making, and thus the highly variable pattern identified above. (p.36)

Further, these inequities in provision apply between and within schools, in relation to indicators of social inequality (such as distribution of free school meals), across key stages and amongst proportions of pupils with special educational needs; similar patterns exist in England and Wales (O'Donnell *et al.* 2006; Mannion *et al.* 2007; Power *et al.* 2009; Williams 2012). Rickinson *et al.* (2004: 9) whose focus was primarily on environmental education (rather than outdoor learning more generally) suggest the reasons for this picture are complex and there are still issues surrounding a 'rigid assessment system', 'crowded curriculum' and 'increased perception of the risks' despite the general tenor of 'wholehearted support'. Similarly, Higgins *et al.* (2006) revealed that 'effort and cost' were being weighed against the idea of 'curriculum' (see also Ross *et al.* 2007).

However, despite such variability in provision and increasing curricular pressures some Local Authorities have consistently encouraged residential outdoor provision for pupils, with many young people taking part in such experiences, usually in curricular time, at least once in their school career (Higgins 2002). For example, one of the most extensive programmes has been North Lanarkshire Council's (NLC) on-going 'Aiming Higher with Outward Bound' (NLC 1998) initiative, the effects of which Christie (2004) evaluated over a five-year period. This and the study are described later.

Current research

Some research evidence (e.g. Christie 2004; Simpson 2007; Telford 2010 and others) supports the links between residential experiences and formal education. However, the breadth, depth and philosophical rationale of those links, and the links to outdoor learning more generally, need to be established for this approach to be considered a credible and valuable component of young people's education, and recent studies have begun to address this issue. For example CUREE (2010) conducted a recent review of international literature³ related to residential and identified 67 review titles, yet only considered eleven studies worthy of in-depth review⁴, eight of which were UK based (two in Scotland including Christie (2004)) and three in the USA. This led CUREE to 'the supposition that there were relatively few studies which attempted to isolate, and to separately and systematically evaluate, the specific contribution of the residential component' of out of school programmes (p. 2). This finding simultaneously highlights the knowledge gap and emphasises the need to conduct further, quality research.

Considering the Scottish context, Beames *et al.* (2009) have provided a thorough account of the opportunities created for outdoor learning following the introduction of Curriculum for Excellence⁵ (CfE). Their research has made a significant contribution to current knowledge whilst prompting others (such as Beames *et al.* 2011; Christie *et al.* in

³ This literature review formed part of a wider evaluation - Learning Away - which is a £2.25m Paul Hamlyn Foundation initiative that aims to support schools in significantly enhancing young people's learning, achievement and well-being by using innovative residential experiences as an integral part of the curriculum. The initiative began in 2008 and will run for six years. CUREE will conduct the evaluation. See <http://www.phf.org.uk/landing.asp?id=769> for further information.

⁴ Certain inclusion criteria did narrow the selection, see CUREE 2010 for full details of the parameters.

⁵ In 2005 Curriculum for Excellence was introduced as the new 3-18 curricular framework for schools in Scotland. It replaced the 5-14 Curriculum Guidelines.

review; Nicol 2012 and ourselves in the present paper) to continue to explore this issue and further clarify the fundamental role of outdoor learning both in terms of its philosophical foundations (Nicol 2012) and in terms of how this approach ‘fits’ within the educational framework in which we currently operate. Consequently, Beames *et al.* (2011: 3) state the ‘big question in the outdoor learning sector has moved from “does it work?” to “how do we do it?”’. In parallel with this we agree with Nicol’s (2012) concern that a philosophical rationale should underpin outdoor learning. Nicol (2012) suggests that the ‘vagaries of curricular reform (and whether outdoor education was ‘in’ or ‘out’) together with insecure funding sources means that nowadays empirical research and theorising in outdoor education is more readily identifiable with instrumental claims’ (p. 2). This is important, he argues, because researchers in the field need to remember that their work should be informed and guided by philosophical foundations and these should not be ignored at the expense of a ‘desire to fit in’ (Nicol 2012: 2).

Returning to a UK-wide perspective, Williams (2012: 148) states ‘if the aspiration that outdoor education should become embedded within the curriculum is to come to fruition, the outdoor community needs to build the evidence base for the contribution that it makes to educational objectives’. Despite his optimism Williams concedes that ‘this is a long job!’ (p.148) and we agree that there is much to do, especially in relation to the limited evidence supporting residential provision.

The purpose of this paper

Given this context, the purpose of this paper is to first, highlight the continuing commitment to and relevance of residential outdoor learning experiences within Scotland’s current school curriculum; and second, to demonstrate that there are fundamental philosophical aspects of outdoor learning that have relevance beyond the educational framework of the time, and are relevant to the major objectives of schools and modern curricula more generally. Therefore, we acknowledge Nicol’s commitment to the original reform pedagogy of outdoor education whilst accepting (as does he) the need to link theory to practice at both a philosophical and teaching/instructional level. To this end, we outline the significant recommendations from the Aiming Higher with Outward Bound⁶ (hereafter abbreviated to ‘Aiming Higher’) study (Christie, 2004) in the context of CfE, and discuss the fundamental and enduring aspects of residential outdoor learning that could complement the curriculum, making best use of the opportunities it offers for cross-curricular education. The ensuing discussion is guided by three central themes; progression, connection and relevance and there are reasons for this; first, these themes appear to be core to many outdoor learning experiences; second, they are central to recommendations arising from the Aiming Higher evaluation; and third, they are evident within the previous (5-14 National Guidelines) and current educational framework (CfE) in Scotland. We will also address aspects of Beames *et al.*’s (2011) question (‘how do we do it?’) by offering generic recommendations for the development of future residential programmes within mainstream education and build on recent research (such as Simpson 2007; Ross *et al.* 2007; Beames *et al.* 2009; Williams 2012) by suggesting areas for future study.

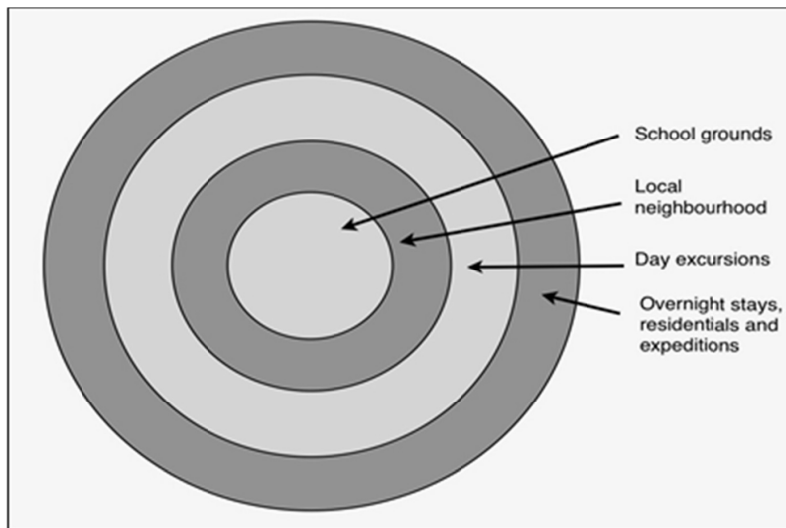
DEFINING RESIDENTIAL PROVISION AND HIGHLIGHTING ITS POTENTIAL

For clarification, the term ‘residential(s)’ is used throughout this paper to refer to educational visits such as ‘outdoor learning trips to residential outdoor centres and/or expeditions that involved being away from home overnight’ (LTS 2010a: 18). Recently, Beames *et al.* (2011) outlined the range of contexts available for outdoor learning using an adaptation of Higgins and Nicol’s (2002) ‘concentric circles’ model.

⁶ Outward Bound™ is an international educational charity which specialises in working in outdoor environments. It is the umbrella body for the separate Outward Bound Trust organisations.

Figure 1 The four zones of outdoor learning (Beames *et al.* 2011: 6)

The model suggests that pupils' outdoor learning experiences start with school grounds (in the centre circle) and generally progress, 'circle-by-circle', through local neighbourhoods and



day-excursions to the final 'circle', where they are away overnight at a residential base or even on an expedition. For example a pre-school or lower-primary pupil may begin to explore their local community and use local places as a context for learning before progressing (in upper-primary and secondary education) to day-trips and overnight stays in differing locations.

RE-VISITING PREVIOUS CURRICULUM-RELATED RESIDENTIAL OUTDOOR LEARNING RESEARCH

Christie (2004) conducted research on a curriculum-related residential outdoor learning programme. As her study took place prior to the transition between the previous educational framework (5-14 National Guidelines) and the current educational framework (CfE), we can begin to identify any enduring policy significance of such experiences. Rather than exploring the full details of the research (see Christie (2004) and Christie *et al.* (in review)) the present paper will focus on the links between that evaluation, the current curriculum and areas for future research. In doing so we can contribute to the reduction of the knowledge gap identified by Simpson (2007) and reiterated by Beames *et al.* (2009: 32) in their statement that whilst 'commentators have asserted the apparently strong resonance between CfE and outdoor learning ... there has been little explanatory argument to support this'.

Background

North Lanarkshire Council's (NLC) 'Raising Achievement' initiative was developed to allow young people to experience active, experiential learning through a combination of music, arts, drama, and residential opportunities - through the Aiming Higher programme. The overall initiative (NLC 1998) was influenced by Gardner's theory of 'multiple intelligences' that suggests the concept of a single 'intelligence' is out-dated and that intelligence should be thought of as multi-faceted - comprising musical, bodily-kinaesthetic, logical-mathematical, spatial, linguistic, inter-personal and intra-personal intelligences and more recently natural intelligence (human relationship with the environment) (Gardner 1993).

Gardner argues that traditional education systems favour logical-mathematical intelligence, and consequently this limits the potential for those who are better suited to understanding and learning in other ways. The significance of this concept to NLC can be seen in their belief and subsequent action to ensure that opportunities were found within the 'educational system for students to experience achievement and success at whatever level and in whatever context is appropriate' (NLC 1998: 5). This holistic and contextually inclusive approach to education resonates with the general tenor of CfE which 'includes the totality of experiences which are planned for children and young people through their education, wherever they are being educated' (Education Scotland, 2012). Further, specific policy guidance now exists which links outdoor learning and CfE ('Curriculum for Excellence through Outdoor Learning' (CfETOL) (LTS 2010a) discussed below). However, when the Aiming Higher initiative was launched in 1998 it was the only one of its kind within the UK and no such guidance or policy support existed at that time.

Grounded within this context then, we can legitimately begin to comment on the relevance of residential outdoor learning provision as an aspect of a whole school approach to raising achievement. Furthermore, we can also offer potential insights into contemporary agendas and current policy development⁷ surrounding similar integrated approaches related to attainment and behaviour; areas often associated with outdoor learning (Nundy 1998; Dismore & Bailey 2005; Williams 2012).

Programme design

The Aiming Higher programme has run every year since 1998, and over a period of 15 weeks from October to February around 25% of fourth-year students (approx. 1000 pupils) aged 14-16 years, attend the Outward Bound (OB) centre at Loch Eil⁸ for a five-day residential. The number of places allocated to each school is calculated by NLC using the school roll and the percentage of pupils entitled to footwear and clothing grants; however, the selection process for allocating pupils to places is determined by school staff and therefore varies across the region. During the week at Loch Eil the students are randomly divided into groups of six to take part in a range of adventurous physical outdoor activities and carry out a number of tasks. For example, they are expected to clean and store their technical equipment and clothing, clean the shared eating and rest areas, work together to plan and undertake a hill-walking day, build and sail a raft, take turns to support one another during a rock-climbing and abseiling session. They also have to provide daily updates of current news stories, and weather reports to all students at least once during the week. As dormitory groups, they are expected to keep their sleeping areas clean and tidy, as their rooms are inspected every morning.

Evaluation

When it began in 1998 the Aiming Higher programme was a unique example of an outdoor experiential approach to learning as part of a mainstream secondary education, and so presented a significant opportunity for conducting original evaluative research. The programme's evaluation (1998 – 2004) formed the basis of a doctoral study (Christie 2004) that combined quantitative and qualitative methods within a large scale quasi-experiment, and was driven by three questions; first, does the programme provide an opportunity for positive development?; second, does the course being offered by OB support positive personal development in that case?; and third, what impact (if any) does the programme

⁷ For example this is relevant to two current Scottish Government Ministerial Advisory Groups: 'One Planet Schools' (<http://www.scotland.gov.uk/Topics/Education/Schools/curriculum/ACE/OnePlanetSchools>) is exploring whole school approaches to sustainable development, global citizenship, and outdoor learning; and 'Scottish Studies' (<http://www.scotland.gov.uk/Topics/Education/Schools/curriculum/ACE/ScottishStudies>) which takes a broad view of the cultural and natural heritage of Scotland.

⁸ The other 75% remain in school and continue normal schooling.

have in terms of the 5-14 National Guidelines for the curriculum⁹? (see Christie *et al.* (in review) for a recent analysis of the evaluation).

The research was conducted in three phases. First, a 'Life Effectiveness Questionnaire' (LEQ) (Neill 2002) was administered to all 14-16 year old students within a representative sample of six secondary schools (selected from a population of 27 schools in the region) on three occasions; one month before, one month after and again three months after their residential week. This procedure was followed over two consecutive years of the programme, and involved over 800 pupils. Second, a sample of 53 students taken from those who had attended OB, took part in a group-interview session involving smaller groups averaging six pupils per interview. Third, a smaller sample of eight students were observed during their residential and then interviewed individually towards the end of that week. Finally, the 'dispositions' concept was applied as a broad analytical framework to help to combine the methodological approaches and to provide a clear curricular context.

At the time of the study (1999-2004) the Scottish education system followed the Scottish Office Education Department (SOED) 5-14 National Curriculum Guidelines (SOED 1991 a,b). The concept of dispositions was taken from those guidelines, reflecting the curricular framework of the time. The five dispositions can be summarised¹⁰ as: a commitment to learning; a respect and care for self; a respect and care for others; a sense of social responsibility; and a sense of belonging (LTS 2000: 5). The 5-14 National Guidelines state that the dispositions help to 'guide pupils in making decisions and taking action' by providing them with a 'fundamental basis for a personally rewarding life and an effective community' and that these should 'find expression in the curriculum that pupils study, in the contexts in which their learning is structured and in the relationships that encompass both their learning environment and later life' (LTS 2000: 5). There is a clear overlap between the claims traditionally made for outdoor learning which can be summarised as developing a respect and care for self, others and the environment (Mortlock 1984; Hopkins & Putnam 1993; Cooper 2004) and the dispositions framework. Additionally, there are similarities between the dispositions and the four capacities which underpin CfE (see below). Further, links have also been made between outdoor learning and CfE (Simpson 2007; Beames *et al.* 2009; Beames *et al.* 2011) and it is now the theme of published LTS guidance, (see CfETOL (LTS 2010a)). Therefore by using the dispositions as the structure for the overall analysis the findings can be related to both experiential outdoor learning and mainstream approaches to education, and we can begin to produce a common narrative which transcends both the previous and current curricular approaches. Additionally, the aim of fostering positive 'dispositions' or 'capacities' is now prevalent in the curricula of many countries and so the findings for this evaluation and resultant work may have significance beyond the UK.

Findings

Programme-specific: The evaluation produced three main programme-specific findings. First, the residential programme delivered by OB provided an opportunity for personal development, consistent with the dispositions. Second, the overall residential outdoor learning process from pre- to post-course work appeared to support positive development. Third, the overall Aiming Higher programme had some overall positive effects on the participants. In other words, the residential provided an opportunity for development, the educational framework supported this both at a school and curricular level, and the students responded positively to this opportunity.

The results of the quantitative study showed a remarkable stability in the pupils' self-perception as measured by the LEQ despite the potential influence of the residential. There were, however, some specific LEQ components where there were marginal, but not

⁹ These guidelines pre-date 'Curriculum for Excellence'. The most relevant of these documents, published by the Scottish Office Education Department (SOED) relate to Personal and Social Development (SOED 1991a) and 'Expressive Arts' (SOED 1991b).

¹⁰ See LTS (2000) for more information on the dispositions concept.

statistically significant, differences between the two groups (Christie *et al.* in review). Yet in contrast interviews with the students pointed to positive overall effects in terms of their perceptions of their social and academic skills. For example, they felt they had become more confident and better able to communicate with others, and some described how this had transferred into the classroom (Christie 2004). In those cases students self-reported improved performances in oral examinations (specifically English and French) as they were more able to speak-out in a classroom situation, and so could ask for help from teachers and other students. This suggests some degree of impact related to attainment and behaviour that would be worthy of further study; specifically links between attainment, behaviour, the development of cross-curricular skills and competencies and the role of outdoor learning in this process.

In summary, the group interview results correlate with the participant observation and individual interview data, however, as stated above, the LEQ did not demonstrate such a positive effect. This could suggest that either the LEQ is not 'sensitive' enough to give positive results or that this type of study does not lend itself to quantitative analysis. Though the weight of evidence from the study suggests positive change, further investigation into both the LEQ and general quantitative analysis in this field is necessary to clarify this issue (Christie *et al.* in review).

The purpose of re-visiting this particular study within this paper is to highlight the fundamental aspects of residential outdoor learning, therefore the discussion focuses on the general observations that arose and considers them in relation to the broader theoretical context under three main themes - progression, connection and relevance. This process addresses both aspects of Nicol's (2012) and Williams' (2012) recommendations and builds on the work of Beames *et al.* (2009), by acknowledging the theoretical and philosophical context whilst examining the findings for clear links to an educational framework – CfE.

THE PAST AND THE PRESENT: FUNDAMENTAL ASPECTS OF RESIDENTIAL OUTDOOR LEARNING

Progression: progressive experiences

Christie's (2004) evaluation demonstrated that residential outdoor learning offered opportunities for progressive experiences. Those schools that anecdotally demonstrated the most positive effects and retention of the experience at the six-month follow-up interview were those that had a good post-residential infrastructure (Christie 2004). For example such students were supported with timetabled review sessions once they returned from Loch Eil and they were encouraged to build upon their experiences by sharing them within the classroom and at whole-school events. In those cases the students' experiences of the 'place' they had visited (residential centre and outdoor locations they visited) were drawn upon and used as a stimulus for their learning. This supports the general findings of the CUREE literature review (2010) and reflects the broader, theoretical literature on progressive experiences such as those that use the starting point of 'place' (whether local or further afield) as a context for learning (see Higgins 2002; Simpson 2007; Harrison 2010; Wattchow and Brown 2011). Such literature suggests a wider form of progression over time, both through repeat visits to the same or other locations, at different educational stages or seasons, and using different topics or themes.

Additionally, policy guidance specifically CfETOL (LTS 2010a: 10) (see below) advocates the benefits of such 'progressive experiences' suggesting that educators should maximise 'the use of local contexts' and 'repeat visits at different levels to add depth to the totality of experiences'. The document (LTS 2010a) illustrates how multiple visits potentially offer new experiences; for example the same country park offers different learning opportunities for a pupil who visits in their first year and again in their final year of primary school. Similarly, a residential may stimulate new appreciation and insights when students subsequently visit other (local or remote) areas, and as Simpson (2007: 233) suggests residentials can encourage young people 'to learn from other experiences'.

More generally, a number of educational theories have influenced the pedagogical constructs of outdoor learning, for example constructivism (Piaget 1971), multiple intelligences (Gardner 1993), socio-psychological influences (Mead 1962) and progressive, experiential practice (Dewey 1938). However, the theme of 'place' binds these theoretical concepts as it provides the context for the development of a connection to real-world situations (Wattchow & Brown 2011). Any such development will be the result of an on-going interaction between a person and their physical and socio-cultural environments, and the varied nature of such experiences can be expected to influence the eventual construction of meaning from that experience. As Mead (1962: xxv) states 'the individual constitutes society as genuinely as the society constitutes the individual' and the individual in his experiences 'is continually creating a world which becomes real through his discovery' ... 'insofar as new conduct arises under the conditions made possible by his experience' (p. 209).

Therefore, the context of a learning experience can be viewed as an influential aspect of the pedagogical process. This supports the concentric model proposed by Higgins and Nicol (2002) as it demonstrates the variety and relatedness of outdoor learning experiences both within school grounds and beyond, involving both day-trips and residential. This progression extends the range and scope of available learning contexts, yet ensures that each experience builds on the last, by either relating it back to an individual's local community, or extending it out to consider their part in the wider world. As Beames *et al.* (2011) have noted recently 'learning about, caring for, and developing love for a place takes time' and 'repeated visits and long-term projects can help build meaningful and lasting relationships between people and places (p. 46).

Connection: connected experiences

The issue of connection is two-fold here; it relates to connections extending both to and from the residential experience. For example students can build upon previous experiences (progression) therefore connections are made from past experiences to the new residential experiences, also such new experiences can be connected from that time to a students' home and classroom environment (relevance). Christie's (2004) study raised important issues concerning the connection between the residential experience and the home/school environment; especially the transfer of skills between the two environments. Considering these issues in a contemporary context and relating them to the 'concentric circles' model, shows that consideration needs to be given to the ways in which the outer circles (residential/overnight stays) relate to and progress the experiences gained in the inner circles (school grounds/local neighbourhoods), and indeed what follows-on from 'outer-circle experiences' when students return to local environments.

Simpson (2007) suggests that learning which arises from '[residential] experiences should be reflected upon for students to learn from them' and such experiences 'should be seen as something that could be carried into other parts of students' lives' (p.233). Beames *et al.* (2011) similarly reinforce and extend this thinking by stating that the 'world outside the classroom where curiosity and curriculum combine' offers 'powerful stimuli for learning' as such 'integrating outdoor and indoor teaching places the focus on arousing children's curiosity about landscapes and communities within the scope of their everyday lives' (pp. 52-53).

Relevance: relevant experiences

The evidence from Christie's (2004) study and the literature reviewed suggests that outdoor learning offers numerous opportunities for first-hand experiences, which can be revisited within the classroom. For example some students used their residential experience as the topic for their oral examinations as they felt they 'had something to stand up and talk about' (Christie 2004: 201). Others discussed how it affected their general attitude towards classroom work, for example one student stated:

'if I am stuck with something I will just go with it as I know what it is like on that week, cause if you could nae [not] do something you just found a way around it, that is what kinda [kind of] helps you in school work and that' (p.192)

Similar transfers between outdoor and indoor learning have been noted in the wider literature. For example, Hopkins (2011) whilst discussing Adventure Learning Schools¹¹ described how outdoor learning could practically complement indoor learning stating that 'the problem solving, collaboration, the enquiry that takes place in the outdoors is reflected in the lessons and the curriculum that the young people experience inside the classroom'. Additionally, Telford's (2010) research which considered the enduring significance of residential outdoor education for participants who took part in such courses many years previously, supports the idea that for some these experiences are significant in later life; highlighting the 'very powerful learning experience' provided by a residential specifically in areas relating to 'personal achievement, adulthood and independence, relationships with the natural environment and working and living as a group' (p. 278).

Summary

These themes of relevance, connection and progression are not without precedent. For example, in 'A Question of Living' (1963), the educationalist and Headmaster R. F. Mackenzie (1910-1987) outlined a vision for educational reform which had at its heart the notion that the everyday world with which young people are familiar should be used to extend and enrich learning, and he believed that residential outdoor experiences could be used to bring deeper relevance into the education system. In his vision for the future of Scottish education Mackenzie felt strongly that 'schools will get a chain of huts and bothies'¹² throughout the Highlands' and pupils should be 'encouraged to explore their own country, learning its geology, natural history and historical backgrounds so that they can take a lively and understanding part in shaping its future' (Murphy 1998: 146). Whilst Mackenzie's vision has not been realised, and some of the more controversial aspects such as his call for the elimination of the examination system remain contentious, there are aspects of his proposal that would find favour in the general tenor of CfE and its advocacy for schools focusing on the development of personal capacities that students can draw on in later life (LTS 2010a,b).

Therefore, considering philosophical principles such as these and taking into account the findings from the Aiming Higher study and more recent publications such as Beames *et al.* (2009), there is a clear argument that progressive outdoor learning provision within schools has continued significance and relevance. This case can be traced back to Mackenzie's vision (and earlier - see Higgins (2002)), through to more recent curriculum developments and policy guidance such as CfETOL (LTS 2010b).

INFORMING CURRICULUM FOR EXCELLENCE THROUGH OUTDOOR LEARNING - MOVING TOWARDS CLEAR CURRICULAR LINKS

The central theme of CfE is the development of the personal skills and attitudes of young people; encouraging them to develop the capacities of 'successful learners', 'confident individuals', 'responsible citizens' and 'effective contributors' (LTS 2010b), with much less emphasis (than previously) being placed on a subject-oriented curriculum. In terms of the Aiming Higher study, these capacities closely resemble the structure and nature of the dispositions framework discussed earlier, and as with the dispositions concept, they (and any changes) are difficult to evaluate or measure.

Additionally, the similarity between the claims made for outdoor learning and the four capacities has been recognised by the Scottish Government which funded an initiative called 'Outdoor Connections' (LTS 2010a) (that was subsequently guided by the 'Outdoor Learning

¹¹ See www.adventurelearningschools.org for more information on Adventure Learning Schools.

¹² Unoccupied shelters in remote areas.

Strategic Advisory Group (OLSAG)), and a major research programme, the results of which have been published in a series of reports summarised by Nicol *et al.* (2007). Through analysis of this and other research, OLSAG and LTS/Education Scotland staff identified ways in which outdoor learning might deliver the CfE capacities and in doing so it became clear that the flexibility of CfE would allow schools to arrange much of their teaching outdoors if they wished to do so. This approach has been convincingly advocated by LTS (2005, 2007), Simpson (2007) and more recently Beames *et al.* (2009: 42) who argue that 'situated learning in the world outdoors looks exceptionally legitimised by CfE and exceptionally able to deliver CfE's purposes', as it challenges the 'dominant, fragmented model of learning' and 'legitimises the kinds of cross-curricular, autonomous learning that may be offered by theoretically-driven educational opportunities outside the classroom'. Simpson (2007) recognised the opportunities that the new curriculum affords, stating that the 'advent of CfE also provides opportunities to extend outdoor education as it moves away from a prescriptive approach to the curriculum', similarly he 'recognises that learning is embedded in experience' and as such 'outdoor learning can improve children's learning experiences' (p. 266). Further, his study highlights that such an alignment afforded the Outdoor Connections development programme an opportunity 'to draw clear links between outdoor education and the aims of education in Scotland' (p. 38).

Consequently, in Scotland, recent developments within the educational framework coupled with such growing interest in, and awareness of outdoor learning, has led to increased demonstrable educational policy support. For example, the work of OLSAG and LTS led to publication of the guidance document CfETOL (LTS 2010a) which supports the delivery of outdoor learning as part of CfE and states that 'outdoor learning offers many opportunities for learners to deepen and contextualise their understanding within curriculum areas, and for linking learning across the curriculum in different contexts and at all levels' (p. 9).

With specific reference to residential experiences, CfETOL (LTS 2010a: 18) states that 'project work to take forward during the residential experience should build on previous learning' and that 'taking an appropriate quality task back to the school environment will maintain an important element of depth'. This guidance considers the structure that supports this transfer, rather than the skills that are transferred per se. Therefore it resonates with another aspect of the transfer of learning related to the pre- and post-course experience that was evident but variable between and within schools, during the Aiming Higher programme (Christie 2004). For example, the experience stopped for some pupils when they boarded the bus to return home (as one pupil commented, 'then I was back to school with a bang ... dopey ... dunce. I came back down to earth with a bang, forever' (Christie 2004: 187)), whereas other pupils were encouraged to see the links between their recent residential experience and opportunities for its expression within the curriculum (as one pupil commented, 'it [the residential] makes you want to help people more, cause like we have been getting help and you want to dae [do] it for other people from other classes ... like I am good at computing and I have been helping a lot of people' (Christie 2004: 203)). The recent guidance document (CfETOL) recognises this issue and suggests that 'in order to maximise the benefits of residential experiences, careful planning and preparation, including work undertaken with children and young people before and after the residential experience, is key to the relevance, coherence, breadth and depth of learning' (LTS 2010a: 18).

SUGGESTIONS FOR RESIDENTIAL PROGRAMME DEVELOPMENT

The programme-specific recommendations from the Aiming Higher study have been translated into three generic, practical suggestions for future residentials, which go some way towards answering Beames *et al.*'s (2011) question - 'how do we do it?' and also extend the practical suggestions offered within the CfETOL guidance (LTS 2010a: 18). In essence such programmes should be progressive, connected and relevant.

1. Progressive: Residential should have a comprehensive pre- and post-course structure to support students through the transition periods before and after the residential. They should also build on previous outdoor learning experiences.
2. Connected to the curriculum: If the residential is to provide an educational experience, then the educational content of that provision should be examined to ensure that the programme supports the curricular framework within which it is embedded. As Higgins (2010) argues, 'it must be a central expectation of a professional educator that he or she is able explain to a student, parent, teacher and politician "why (I am) doing this activity with each of these young people here now"' (p. 13). Those taking the students to the residential experience (head-teacher and school staff) and the residential provider (manager and instructors) should be able to answer this question.
3. Relevant - to the school context and location: Both the school and the residential provider should fully understand and support the intended programme outcomes. By understanding these the teaching/instructional staff can ensure that the programme remains relevant to the students' school and home environment, thus easing the transfer of learning between the two contexts. Furthermore, a supportive ethos should be developed as this encourages the residential to be viewed positively by students, parents, and other stakeholders.

POTENTIAL AREAS FOR FUTURE RESEARCH

We have identified four main areas for future research:

1. There is a need for continued development of methodological triangulation as an approach to understanding the impact and value of residential. The quantitative aspect of the Aiming Higher evaluation produced some interesting results which became clearer when they were considered alongside the qualitative data. Further investigation is required to examine the suitability of each approach in these educational domains, a case further articulated by Christie *et al.* (in review).
2. The extent to which the development of the 'four capacities', through outdoor learning translates across the curriculum requires further examination. This is part of the broader issue of why, and how these capacities, which remain at the core of mainstream education and CfE, are of benefit to students during their time at school and in their life beyond formal education. This is relevant at both a UK and international level as the general tenor of the capacities (and related concepts) are increasingly evident in other countries' curricula.
3. An original aim of the Aiming Higher research proposal (Christie 2004) was to investigate the link between residential provision and attainment by analysing the eventual Standard Grade¹³ results of those students who went to OB in comparison to their expected results from their 'prelims' (mock examinations taken before their actual examinations). However the proposed period of study was blighted by a controversy with the Scottish Qualifications Agency, which led to a lack of confidence surrounding the eventual Standard Grade and Higher results for that year (Wojatis, 2000). Therefore such an investigation would neither have been feasible nor reliable given the circumstances (Christie 2004). Consequently, these issues remain unexplored and future research into this area is advised, especially given the lack of research focusing on attainment from an outdoor learning perspective (Clay 1999; Williams 2012).
4. To build on point three above and to address areas of current and emerging policy development in Scotland, future research should investigate the potential of outdoor learning as an approach that offers multiple opportunities to deliver many of the major objectives of schools and modern curricula. This type of investigation would go beyond the immediate relevance of CfE and the 'capacities' issue (as addressed in this paper and by others such as Beames *et al.* 2009; Beames *et al.* 2011) and explore broader links to attainment and behaviour more generally. Similarly, it could investigate the efficacy of whole school approaches which would encompass a range of issues such as sustainable

¹³ Standard Grades are the level of examination set for fourth year pupils in Scotland.

development, global citizenship and health and wellbeing; elements of which are already approached through outdoor learning. These issues, and others, are the focus of emerging policy developments for example, currently, there is much debate surrounding the introduction of Scottish studies as a theme and potential subject area within schools in Scotland. This was included in the Scottish National Party 2011 Election Manifesto and its intent is to engage school pupils in exploring the country's history, literature, language and culture (Denholm 2011). Doing so in any comprehensive way seems unthinkable without properly focused outdoor learning experiences, and this is highlighted in the report and recommendations of the Scottish Studies advisory group¹⁴. Similarly, the same manifesto made a commitment to explore a whole school combined approach to sustainable development, global citizenship and outdoor learning called 'One Planet Schools'¹⁵. This advisory group has not yet reported but its remit is, in-part predicated on the significance of outdoor learning in understanding and valuing the environment. Future research could help to articulate the synergistic gains afforded through such integrated approaches.

CONCLUSION

Residential outdoor learning provision in the UK represents a substantial commitment for families (in terms of cost - unlike school-based education residential are normally paid for at commercial rates), for schools (staff and student time), for local authorities (resources and funding - especially if they maintain their own centre) and for governments (through educational, advisory, support and inspection structures). Although there are no recent estimates of the scale of residential provision it continues to be widespread in the UK and has probably grown since the estimate of 300,000 student-days/year in Scotland calculated by Higgins in 2002. In light of this the limited research in the field is in sharp contrast to both the claims made by proponents for its value, and the modest scale of the research. In essence it has been widely assumed that residential outdoor learning is 'a good thing' and this assumption has not been subject to detailed scrutiny. The advent of CfE and policy support in Scotland in recent years has paved the way to a more detailed understanding of the phenomenon, and this paper has sought to contribute to that process.

The few original empirical UK based studies (Nicol 2001; Christie 2004; Higgins *et al.* 2006; Nicol *et al.* 2007; Simpson 2007; Beames *et al.* 2009; Telford 2010; Williams 2012) that have been carried out have indicated that whilst young people clearly benefit from residential experiences this phenomenon is not well understood. The general lack of research investment makes it difficult to identify the relationship between the nature of the experience and activities, and any such benefits. This is not helped by the lack of external scrutiny (e.g. by HMIE¹⁶) or even internal evaluation of such programmes. It is understandable that in a competitive market-place providers may make claims for their programmes that are not supported by specific local evaluation, but instead draw on anecdotes or individual studies and meta-analyses that are devoid of context. Similarly critical, Hattie *et al.* (1997: 85) noted that 'research and adventure programs can provide many insights which might inform regular educational contexts, however they were conducted as through they operated in isolation from the educational world'. We have gone some way towards addressing these issues by reporting a specific local evaluation that provides a rare insight into the enduring links between outdoor experiential learning and the changing framework of mainstream education in Scotland.

¹⁴ See

<http://www.scotland.gov.uk/Topics/Education/Schools/curriculum/ACE/ScottishStudies/workingGroupConclusions> for further information.

¹⁵ See <http://www.scotland.gov.uk/Topics/Education/Schools/curriculum/ACE/OnePlanetSchools> for further information.

¹⁶ Her Majesty's Inspectors of Education do of course inspect schools regularly, but there is no legal or policy requirement to inspect residential centres, and there are very few examples of these being carried out in the UK.

Additionally, we have also attempted to explore the implications of the 'concentric circles' model (Higgins & Nicol 2002) by demonstrating the ways in which local outdoor experiences can be built upon and extended to encourage the integration of residential as part of a progressive and holistic approach to outdoor learning. By positioning the residential experience within this structure it can be viewed, both by pupils and practitioners, as an integral part of outdoor learning rather than an 'experience' that is both physically and educationally removed from everyday schooling. This aspect links the findings of the Aiming Higher study to current thinking in the field (Beames *et al.* 2011).

In summary, carefully-constructed outdoor learning experiences can address the core values of Curriculum for Excellence and 'the long-standing key concepts of outdoor pedagogy; challenge, enjoyment, relevance, depth, development of the whole person and an adventurous approach to learning' (LTS 2010a: 7). Also, addressing Nicol's (2012: 2) plea for 'the need to do more philosophy', we can state that the philosophical rationale of outdoor learning can have specific relevance to the way in which young people learn and develop within, between, and beyond formal educational settings. Further, this paper has highlighted that there are fundamental aspects of outdoor learning (progression, connection and relevance) that have significance beyond the educational framework of the time, and can contribute to the major contemporary objectives facing schools as well as the current direction of modern curricula.

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